

# **Missouri Assessment Program Grade-Level Assessments**



## **Guide to Interpreting Results**

**Summative Assessments**  
*English Language Arts,  
Mathematics, and Science*

**August 2021**

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This guide has been prepared by Data Recognition Corporation (DRC) to provide an overview for interpreting reports generated from the Missouri Assessment Program (MAP). It is intended to help educators apply MAP data to the needs of individual students and the district as a whole.

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# INTRODUCTION

## Educational Assessment: A Primary Tool

Assessment, or testing, fulfills a vital role in today's educational environment. Assessment results often are a major force in shaping public perceptions about the capabilities of our students and the quality of our schools. As a primary tool for educators and policymakers, assessment is used for many important purposes. Educators use assessment results to help improve teaching and learning and to evaluate programs and schools. Policy decisions are often based, in part, on assessment data. Because of its important role, educational assessment is used in every classroom, school, district, and state. It is vital to innovation, higher standards, and educational excellence.

Originally developed in response to Missouri's Outstanding Schools Act of 1993, the **Missouri Assessment Program (MAP)** encompasses several statewide assessments that meet state and federal statutory requirements. **MAP Grade-Level Assessments** are administered to students in grades 3 through 8 to determine their progress toward the Show-Me Standards/Missouri Learning Standards. As directed by the Outstanding Schools Act, the Show-Me Standards were developed by the Missouri Department of Elementary and Secondary Education (DESE), in cooperation with teachers, school administrators, parents, and business professionals throughout the state, to identify the knowledge, skills, and competencies that Missouri students should acquire prior to graduating from high school. For a more detailed explanation of the Show-Me Standards, refer to the DESE website (<http://dese.mo.gov/show-me-standards>). The Missouri Learning Standards articulate the Show-Me Standards in each content area across the grade levels. MAP Grade-Level Assessment items are aligned with the Missouri Learning Standards, which are available on the DESE website (<http://dese.mo.gov/college-career-readiness/curriculum/missouri-learning-standards>).

The spring 2021 Grade-Level MAP includes the following required assessments:

English Language Arts (ELA)—Grades 3–8

Mathematics—Grades 3–8

Science—Grades 5 and 8

The ELA assessments for students in grades 3, 5, 6, and 7 required approximately 1½ to 3 hours of test administration time. The ELA assessments for students in grades 4 and 8 required approximately 3 to 5 hours. The Mathematics assessments for students in grades 3–8 required approximately 1 to 2½ hours. In addition, students in grades 5 and 8 took a Science assessment that required an additional 1 to 2 hours of test administration. All assessments were administered online, unless students required a Braille, Large Print, or paper/pencil form as an accommodation.

For all grade levels (3 through 8), the MAP Grade-Level Assessments in ELA and Mathematics include multiple item types. **Selected-response items** (also known as multiple-choice) present students with a question followed by three or more response options. **Short-text items** require students to type an appropriate response. **Technology-enhanced items** use innovative technology to allow students to demonstrate their knowledge in ways that are not possible using paper/pencil assessments. For example, the items may require students to drag and drop data into a table, click on "hot spots" within a graphic, or indicate their response on a grid. Short-text and technology-enhanced items are machine scored. Refer to Section 2.5 of the Test Coordinator's Manual (TCM) for a full list of item types.

The ELA assessments in grades 4 and 8 also include a **writing prompt**. Writing prompts are a special type of performance event in which a student demonstrates his or her proficiency at writing. The ELA writing prompt is scored by trained human readers using a 10-point rubric that evaluates purpose and organization, evidence and elaboration, and conventions. Additional information on the scoring guide/rubrics for the writing process can be found on the DESE website (<https://dese.mo.gov/college-career-readiness/curriculum/english-language-arts>) under the Assessment Resources tab.

The Mathematics assessments in all grades include a performance event (PE). The PEs are designed to provide students with an opportunity to demonstrate their ability to apply their knowledge and higher-order thinking skills to explore and analyze a complex, real-world scenario. At grades 3–8, the performance event includes hand-scored constructed-response items. Mathematics constructed-response items are scored by trained human readers using established scoring criteria.

The MAP Grade-Level Assessments in Science include selected-response items, technology-enhanced items, as well as **constructed-response items**, which require students to supply their answer (similar to short-text items). Science constructed-response items are scored by trained human readers using established scoring criteria.

The Department uses the information obtained through MAP to monitor the progress of Missouri's students toward meeting the Missouri Learning Standards in order to inform the public and the state legislature about student performance and to help make informed decisions about educational issues. The information obtained through MAP provides the academic performance data that drive student services throughout the state. The **MAP Grade-Level Assessment reports** provide useful information for determining the performance of individual students, as well as student performance at the classroom, building, district, and state levels.

# ASSESSMENT TERMS AND TYPES OF SCORES

Familiarity with the testing terms and the types of scores used in the MAP reports and other components will help you interpret test information accurately and efficiently.

## MAP Scale Score

Data Recognition Corporation (DRC), the MAP Grade-Level Assessments testing vendor, uses the student's correct responses to derive a MAP scale score. The scale score describes achievement on a continuum that spans in most cases the complete range of grades 3–8. These scores range in value from 160–650 for English Language Arts and from 185–660 for Mathematics. Science scale score ranges are 100–540 for grade 5 and 285–710 for grade 8. Scale scores for English Language Arts, Mathematics, and Science are computed for the total test and for each reporting category.

The total test scale score is based on student performance on the entire test and indicate a student's overall achievement in English Language Arts, Mathematics, or Science. Higher scale scores indicate higher performance on the test and lower scale scores indicate lower performance on the test.

The reporting category scale score is based on student performance on a subset of test questions measuring a given content category (or domain) of English Language Arts, Mathematics, and Science. These scores represent student performance on the test reporting categories which are listed below:

### English Language Arts Grades 3 through 8

- Reading
- Research
- Writing
- Listening

### Mathematics Grades 3, 4 and 5

- Number Sense and Operations in Base Ten
- Number Sense and Operations in Fractions
- Relationships and Algebraic Thinking
- Geometry and Measurement & Data and Statistics

### Mathematics Grades 6 and 7

- Ratios and Proportional Relationships
- Number Sense and Operations
- Expressions, Equations and Inequalities
- Geometry and Measurement & Data Analysis, Statistics and Probability

### Mathematics Grade 8

- Number Sense and Operations & Expressions, Equations and Inequalities
- Geometry and Measurement & Data Analysis, Statistics and Probability
- Functions

### Science Grades 5 and 8

- Physical Science
- Life Science
- Earth and Space Science

Each reporting category is measured by a minimum of 6 items yielding a minimum of 8 raw score points. Mathematics domains with fewer than 6 items were combined with other domains to increase the reliability of the reporting category scale scores.

## Performance Levels

Student performance on the total test can be reported in terms of four performance levels that describe a pathway to proficiency and *college and career readiness*. Each performance level represents standards of performance for English Language Arts, Mathematics, and Science. Panels drawn from education, business, and professional communities determined the performance standards. Performance-level scores provide a description of what students can do in terms of the content and skills assessed, as described in the Missouri Learning Standards. Performance levels are not determined for reporting categories. Instead, a student's reporting category score can be compared to the total test score that separates *Basic* level from *Proficient* level.

## Lowest Obtainable Scale Score and Level Not Determined

Within each grade level and content area, a Lowest Obtainable Scale Score (LOSS) is established for students whose scores are below the level expected by guessing. Students with certain accommodations that impact the construct being assessed (e.g., read-aloud of ELA passages for students in grades 3–5) also receive a LOSS. In cases where results are invalidated because of conflict of applied accommodation(s) with the content measured on the test, the reporting category scores are still computed to provide information about students' performance on subsets of items.

A student may receive "Level Not Determined" (LND) instead of a MAP scale score. Students who receive LND are not assigned to a performance level. Students may receive LND for the following reasons:

- A student is absent for all testing sessions for a particular content area or did not complete enough items to receive a MAP score.

## Standard Error of Measurement

No test provides a perfect measure of a student's ability. This situation is expected because all tests have a known Standard Error of Measurement (SEM). The SEM reports the amount of variability that can be expected in a student's test score due to the inherent imprecision of the test. In other words, the SEM represents a range of scale scores in which the student's score would likely fall if the student took the same test again. The SEM around the English Language Arts, Mathematics, and Science total test and reporting category scale scores is included, in a graphical format, in the Individual Student Report and will be reported in the 2021 MAP Technical Report.

## Performance Level Descriptors

Performance level descriptors (PLDs) summarize the knowledge, skills, and abilities expected of students in each of Missouri's four performance levels – Advanced, Proficient, Basic and Below Basic. At all performance level settings, Missouri educators used the PLDs in conjunction with the content standards to consider the content-based expectations for students in each performance level on each MAP test. The descriptors for reporting establish a frame of reference for understanding how to interpret test scores, particularly cut scores. To determine validity of the intended interpretation of the MAP scores, it is essential to understand that descriptors were established in a collaborative and participatory process. For a more detailed description of the PLDs refer to the DESE website (<https://dese.mo.gov/college-career-readiness/assessment/grade-level>).

# PERFORMANCE-LEVEL DESCRIPTORS

## English Language Arts, Reporting Performance-Level Descriptors

### Grade 3

#### ***Below Basic***

Students performing at the Below Basic level on the Missouri Assessment Program demonstrate a minimal command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently and/or incorrectly in reading processes responding to literary and informational texts and in writing, listening, and speaking forms. Students performing at the Below Basic level use few strategies to comprehend and interpret texts, demonstrate little understanding of literary forms, and apply few strategies for accessing information.

They demonstrate little or no ability to organize and/or develop writing or exhibit little command of the conventions of standard English.

MAP score range: 160–330

#### ***Basic***

Students performing at the Basic level on the Missouri Assessment Program demonstrate a partial or uneven command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently, partially, or with below-grade-level text; in reading processes responding to both literary and informational texts (in minimal genres); and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Below Basic level, students performing at the Basic level use some strategies to comprehend and interpret a variety of texts, demonstrate a partial understanding of literary forms, and inconsistently apply some strategies for accessing and summarizing information. They demonstrate an inconsistent ability to organize and/or develop writing and exhibit an inconsistent command of the conventions of standard English.

MAP score range: 331–363

#### ***Proficient***

Students performing at the Proficient level on the Missouri Assessment Program demonstrate an adept command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and skillfully in reading processes in responding to literary and informational text and media (in different genres) and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Basic level, students performing at the Proficient level use a range of strategies to comprehend and interpret a variety of texts, demonstrate an understanding of literary forms, and apply strategies for accessing and summarizing information. They demonstrate an adequate ability to organize and develop writing (in different forms and for different purposes and audiences) using specific vocabulary and exhibit a competent command of the conventions of standard English.

MAP score range: 364–394

#### ***Advanced***

Students performing at the Advanced level on the Missouri Assessment Program demonstrate a thorough command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently, precisely, and expertly in reading processes in responding to literary and informational text and media (in different genres) and in writing, listening, and speaking forms efficiently and effectively for different audiences and purposes. In addition to demonstrating, understanding, and applying the skills at the Proficient level, students performing at the Advanced level use a wide range of strategies to comprehend and interpret a variety of texts at a more complex level, demonstrate a complete and thorough understanding of literary forms, and consistently apply a wide range of different strategies for accessing and summarizing information. They demonstrate an effective and thorough ability to organize, develop, and reflect/analyze their own writing (in different forms and for different purposes and audiences) using specific vocabulary and exhibit an extensive command of the conventions of standard English.

MAP score range: 395–560

## **Grade 4**

### ***Below Basic***

Students performing at the Below Basic level on the Missouri Assessment Program demonstrate a minimal command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently and/or incorrectly in reading processes responding to literary and informational texts and in writing, listening, and speaking forms. Students performing at the Below Basic level use few strategies to comprehend and interpret texts, demonstrate little understanding of literary forms, and apply few strategies for accessing information. They demonstrate little or no ability to organize and/or develop writing or exhibit little command of the conventions of standard English.

MAP score range: 170–336

### ***Basic***

Students performing at the Basic level on the Missouri Assessment Program demonstrate a partial or uneven command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently, partially, or with below-grade-level text; in reading processes responding to both literary and informational texts (in minimal genres); and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Below Basic level, students performing at the Basic level use some strategies to comprehend and interpret a variety of texts, demonstrate a partial understanding of literary forms, and inconsistently apply some strategies for accessing and summarizing information. They demonstrate an inconsistent ability to organize and/or develop writing and exhibit an inconsistent command of the conventions of standard English.

MAP score range: 337–387

### ***Proficient***

Students performing at the Proficient level on the Missouri Assessment Program demonstrate an adept command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and skillfully in reading processes in responding to literary and informational text and media (in different genres) and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Basic level, students performing at the Proficient level use a range of strategies to comprehend and interpret a variety of texts, demonstrate an understanding of literary forms, and apply strategies for accessing and summarizing information. They demonstrate an adequate ability to organize and develop writing (in different forms and for different purposes and audiences) using specific vocabulary and exhibit a competent command of the conventions of standard English.

MAP score range: 388–418

### ***Advanced***

Students performing at the Advanced level on the Missouri Assessment Program demonstrate a thorough command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently, precisely, and expertly in reading processes in responding to literary and informational text and media (in different genres) and in writing, listening, and speaking forms efficiently and effectively for different audiences and purposes. In addition to demonstrating, understanding, and applying the skills at the Proficient level, students performing at the Advanced level use a wide range of strategies to comprehend and interpret a variety of texts at a more complex level, demonstrate a complete and thorough understanding of literary forms, and consistently apply a wide range of different strategies for accessing and summarizing information. They demonstrate an effective and thorough ability to organize, develop, and reflect/analyze their own writing (in different forms and for different purposes and audiences) using specific vocabulary and exhibit an extensive command of the conventions of standard English.

MAP score range: 419–570



## **Grade 5**

### ***Below Basic***

Students performing at the Below Basic level on the Missouri Assessment Program demonstrate a minimal command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently and/or incorrectly in reading processes responding to literary and informational texts and in writing, listening, and speaking forms. Students performing at the Below Basic level use few strategies to comprehend and interpret texts, demonstrate little understanding of literary forms, and apply few strategies for accessing information. They demonstrate little or no ability to organize and/or develop writing or exhibit little command of the conventions of standard English.

MAP score range: 210–350

### ***Basic***

Students performing at the Basic level on the Missouri Assessment Program demonstrate a partial or uneven command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently, partially, or with below-grade-level text; in reading processes responding to both literary and informational texts (in minimal genres); and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Below Basic level, students performing at the Basic level use some strategies to comprehend and interpret a variety of texts, demonstrate a partial understanding of literary forms, and inconsistently apply some strategies for accessing and summarizing information. They demonstrate an inconsistent ability to organize and/or develop writing and exhibit an inconsistent command of the conventions of standard English.

MAP score range: 351–402

### ***Proficient***

Students performing at the Proficient level on the Missouri Assessment Program demonstrate an adept command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and skillfully in reading processes in responding to literary and informational text and media (in different genres) and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Basic level, students performing at the Proficient level use a range of strategies to comprehend and interpret a variety of texts, demonstrate an understanding of literary forms, and apply strategies for accessing and summarizing information. They demonstrate an adequate ability to organize and develop writing (in different forms and for different purposes and audiences) using specific vocabulary and exhibit a competent command of the conventions of standard English.

MAP score range: 403–430

### ***Advanced***

Students performing at the Advanced level on the Missouri Assessment Program consistently demonstrate a thorough command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and skillfully in reading processes in responding to literary and informational text, and in writing efficiently. In addition to demonstrating, understanding, and applying the skills at the Proficient level, students performing at the Advanced level use a wide range of strategies to comprehend and interpret a variety of texts, demonstrate a thorough understanding of literary forms, and consistently apply a wide range of different strategies for accessing and summarizing information. They demonstrate an effective and thorough ability to organize and develop writing and exhibit an adequate command of the conventions of standard English.

MAP score range: 431–600

## **Grade 6**

### ***Below Basic***

Students performing at the Below Basic level on the Missouri Assessment Program demonstrate a minimal command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently and/or incorrectly in reading processes responding to literary and informational texts and in writing, listening, and speaking forms. Students performing at the Below Basic level use few strategies to comprehend and interpret texts, demonstrate little understanding of literary forms, and apply few strategies for accessing information. They demonstrate little or no ability to organize and/or develop writing or exhibit little command of the conventions of standard English.

MAP score range: 230–370

### ***Basic***

Students performing at the Basic level on the Missouri Assessment Program demonstrate a partial or uneven command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently in reading processes responding to both literary and informational texts and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Below Basic level, students performing at the Basic level use some strategies to comprehend and interpret a variety of texts, demonstrate a partial understanding of literary forms, and inconsistently apply few strategies for accessing and summarizing information. They demonstrate an inconsistent ability to organize and/or develop writing and exhibit an inconsistent command of the conventions of standard English.

MAP score range: 371–412

### ***Proficient***

Students performing at the Proficient level on the Missouri Assessment Program demonstrate an adequate command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and competently in reading processes in responding to literary and informational texts and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Basic level, students performing at the Proficient level use a range of strategies to comprehend and interpret a variety of texts, demonstrate an understanding of literary forms, and apply strategies for accessing and summarizing information. They demonstrate an adequate ability to organize and develop writing and exhibit a competent command of the conventions of standard English.

MAP score range: 413–437

### ***Advanced***

Students performing at the Advanced level on the Missouri Assessment Program consistently demonstrate a thorough command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and skillfully in reading processes in responding to literary and informational texts and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Proficient level, students performing at the Advanced level use a wide range of strategies to comprehend and interpret a variety of texts, demonstrate a complete and thorough understanding of literary forms, and consistently apply a wide range of different strategies for accessing and summarizing information. They demonstrate an effective and thorough ability to organize and develop writing and exhibit an extensive command of the conventions of standard English.

MAP score range: 438–620

## **Grade 7**

### ***Below Basic***

Students performing at the Below Basic level on the Missouri Assessment Program demonstrate a minimal command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently and/or incorrectly in reading processes responding to literary and informational texts and in writing, listening, and speaking forms. Students performing at the Below Basic level use few strategies to comprehend and interpret texts, demonstrate little understanding of literary forms, and apply few strategies for accessing information. They demonstrate little or no ability to organize and/or develop writing or exhibit little command of the conventions of standard English.

MAP score range: 240–383

### ***Basic***

Students performing at the Basic level on the Missouri Assessment Program demonstrate a partial or uneven command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently in reading processes responding to both literary and informational texts and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Below Basic level, students performing at the Basic level use some strategies to comprehend and interpret a variety of texts, demonstrate a partial understanding of literary forms, and inconsistently apply few strategies for accessing and summarizing information. They demonstrate an inconsistent ability to organize and/or develop writing and exhibit an inconsistent command of the conventions of standard English.

MAP score range: 384–434

### ***Proficient***

Students performing at the Proficient level on the Missouri Assessment Program demonstrate an adequate command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and competently in reading processes in responding to literary and informational texts and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Basic level, students performing at the Proficient level use a range of strategies to comprehend and interpret a variety of texts, demonstrate an understanding of literary forms, and apply strategies for accessing and summarizing information. They demonstrate an adequate ability to organize and develop writing and exhibit a competent command of the conventions of standard English.

MAP score range: 435–455

### ***Advanced***

Students performing at the Advanced level on the Missouri Assessment Program consistently demonstrate a thorough command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and skillfully in reading processes in responding to literary and informational texts and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Proficient level, students performing at the Advanced level use a wide range of strategies to comprehend and interpret a variety of texts, demonstrate a complete and thorough understanding of literary forms, and consistently apply a wide range of different strategies for accessing and summarizing information. They demonstrate an effective and thorough ability to organize and develop writing and exhibit an extensive command of the conventions of standard English.

MAP score range: 456–630

## **Grade 8**

### ***Below Basic***

Students performing at the Below Basic level on the Missouri Assessment Program demonstrate a minimal command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently and/or incorrectly in reading processes in responding to literary and informational text and in writing, listening, and speaking forms. Students performing at the Below Basic level use few strategies to comprehend and interpret texts and media. They demonstrate little understanding of literary forms and apply few strategies for accessing information while rarely taking into account credibility of sources. They demonstrate little or no ability to organize and/or develop writing. Students exhibit little command of the conventions of standard English.

MAP score range: 250–392

### ***Basic***

Students performing at the Basic level on the Missouri Assessment Program demonstrate a partial or limited command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills inconsistently in reading processes in responding to literary and informational text and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Below Basic level, students performing at the Basic level use some strategies to comprehend, interpret, and support an analysis of a variety of texts and media. They demonstrate a partial understanding of literary forms and inconsistently apply few strategies for accessing and summarizing information while occasionally taking into account credibility of sources. They demonstrate an inconsistent ability to organize and/or develop writing and exhibit an inconsistent command of the conventions of standard English.

MAP score range: 393–442

### ***Proficient***

Students performing at the Proficient level on the Missouri Assessment Program demonstrate an adequate command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and competently in reading processes in responding to literary and informational text and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Basic level, students performing at the Proficient level use a range of strategies to comprehend, interpret, and support an analysis of a variety of texts and media. They demonstrate an understanding of literary forms and apply strategies for accessing and summarizing information while regularly taking into account credibility of sources. They demonstrate a sufficient ability to organize and develop writing and exhibit a competent command of the conventions of standard English.

MAP score range: 443–475

### ***Advanced***

Students performing at the Advanced level on the Missouri Assessment Program consistently demonstrate a thorough command of the skills and processes identified in the Missouri Learning Standards. They demonstrate these skills consistently and skillfully in reading processes in responding to literary and informational text and in writing, listening, and speaking forms. In addition to demonstrating, understanding, and applying the skills at the Proficient level, students performing at the Advanced level use a wide range of strategies to comprehend and interpret a variety of texts, demonstrate a complete and thorough understanding of literary forms, and consistently apply a wide range of different strategies for accessing and summarizing information. They demonstrate an effective and thorough ability to organize and develop writing and exhibit an extensive command of the conventions of standard English.

MAP score range: 476–650

# Mathematics, Reporting Performance-Level Descriptors

## Grade 3

### ***Below Basic***

Below Basic do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 185–325

### ***Basic***

Basic demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 326–361

### ***Proficient***

Proficient demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations, and uses clear and precise language when communicating mathematical understanding. The students are prepared for the next grade level or course and are on track for *college and career readiness*.

MAP score range: 362–389

### ***Advanced***

Advanced demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students are well prepared for the next grade level or course and are well prepared for *college and career readiness*.

MAP score range: 390–520

## Grade 4

### ***Below Basic***

Below Basic do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 210–357

### ***Basic***

Basic demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 358–386

### ***Proficient***

Proficient demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations, and uses clear and precise language when communicating mathematical understanding. The students are prepared for the next grade level or course and are on track for *college and career readiness*.

MAP score range: 387–412

### ***Advanced***

Advanced demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students are well prepared for the next grade level or course and are well prepared for *college and career readiness*.

MAP score range: 413–540

## Grade 5

### ***Below Basic***

Below Basic do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 250–376

### ***Basic***

Basic demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 377–409

### ***Proficient***

Proficient demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations, and uses clear and precise language when communicating mathematical understanding. The students are prepared for the next grade level or course and are on track for *college and career readiness*.

MAP score range: 410–434

### ***Advanced***

Advanced demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students are well prepared for the next grade level or course and are well prepared for *college and career readiness*.

MAP score range: 435–570

## Grade 6

### ***Below Basic***

Below Basic do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 260–387

### ***Basic***

Basic demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 388–416

### ***Proficient***

Proficient demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations, and uses clear and precise language when communicating mathematical understanding. The students are prepared for the next grade level or course and are on track for *college and career readiness*.

MAP score range: 417–437

### ***Advanced***

Advanced demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students are well prepared for the next grade level or course and are well prepared for *college and career readiness*.

MAP score range: 438–580

## Grade 7

### ***Below Basic***

Students do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. These students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 270–393

### ***Basic***

Students demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. These students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 394–434

### ***Proficient***

Students demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. These students are prepared for the next grade level or course and are on track for *college and career readiness*.

MAP score range: 435–461

### ***Advanced***

Students demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. These students are well prepared for the next grade level or course and are well prepared for *college and career readiness*.

MAP score range: 462–600

## Grade 8

### ***Below Basic***

Students do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. These students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 310–419

### ***Basic***

Students demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. These students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness*.

MAP score range: 420–467

### ***Proficient***

Students demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. These students are prepared for the next grade level or course and are on track for *college and career readiness*.

MAP score range: 468–505

### ***Advanced***

Students demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. These students are well prepared for the next grade level or course and are well prepared for *college and career readiness*.

MAP score range: 506–660

# Science, Reporting Performance-Level Descriptors

## Grade 5

### ***Below Basic***

A 5th grade student performing at Below Basic seldom applies science and engineering practices to explain phenomena and design solutions to problems in the natural and the designed world. The student occasionally identifies models and information to identify patterns in data, and to describe parts of systems. The student infrequently recognizes trends in the data collected during an investigation in order to answer questions or to identify possible solutions to problems. The student occasionally uses data and basic computational thinking to explain the cause and effect relationships.

MAP score range: 100–274

### ***Basic***

A 5th grade student performing at Basic applies, with support, science and engineering practices to explain phenomena and design solutions to problems in the natural and the designed world. The student uses models and information to support arguments and explanations, to identify patterns in data, and to describe relationships among parts of systems. The student identifies the data to collect in an investigation in order to answer questions or to describe possible solutions to problems. The student uses data and basic computational thinking to support arguments and explanations about cause and effect relationships.

MAP score range: 275–309

### ***Proficient***

A 5th grade student performing at Proficient effectively applies science and engineering practices to explain phenomena and design solutions to problems in the natural and the designed world. The student develops and uses models and information to construct arguments and explanations and to identify and describe patterns in data and system characteristics. The student asks questions that can be investigated and designs solutions to problems that meet given criteria and constraints. The student uses data and mathematical and computational thinking to construct arguments and explanations about cause and effect relationships.

MAP score range: 310–343

### ***Advanced***

A 5th grade student performing at Advanced effectively, consistently, and appropriately applies science and engineering practices to explain phenomena and design solutions to problems in the natural and the designed world. The student evaluates models and information and revises arguments and explanations by analyzing patterns in data, cause and effect relationships, and system interactions. The student conducts investigations to collect data in order to answer questions and uses criteria and constraints to evaluate solutions to a problem. The student uses mathematical and computational thinking and scientific reasoning to analyze and interpret data in order to evaluate arguments and explanations about cause and effect relationships.

MAP score range: 344–540



## **Grade 8**

### ***Below Basic***

An 8th grade student performing at Below Basic seldom applies science and engineering practices to explain phenomena and design solutions to problems in the natural and the designed world. The student occasionally identifies models, information, and patterns in data to describe relationships among parts of systems and to make predictions about how systems change over time. The student infrequently recognizes trends in the data collected during an investigation in order to identify the relationship between two variables. The student can sometimes identify a solution to a problem. The student occasionally uses data and basic mathematical thinking to explain the cause and effect relationships among parts of systems.

MAP score range: 285–467

### ***Basic***

An 8th grade student performing at Basic applies, with support, science and engineering practices to explain phenomena and design solutions to problems in the natural and the designed world. The student uses models, information, and patterns in data to describe relationships among parts of systems and to make predictions about how systems change over time. The student describes the data to collect in an investigation in order to identify the relationship between two variables. The student identifies a solution to a problem that meets given criteria for success. The student uses data and basic mathematical thinking to support arguments and explanations about cause and effect relationships among parts of systems.

MAP score range: 468–509

### ***Proficient***

An 8th grade student performing at Proficient effectively applies science and engineering practices to explain phenomena and design solutions to problems in the natural and the designed world. The student develops models and uses information and patterns in data to describe relationships among parts of systems and to identify scientific principles, which can be used to make predictions about how systems change over time. The student asks questions and plans investigations to determine the relationship between two variables. The student identifies criteria and constraints and uses patterns in data to evaluate solutions to problems. The student uses data and mathematical and computational thinking to construct arguments and explanations about how parts of a system depend on each other.

MAP score range: 510–536

### ***Advanced***

An 8th grade student performing at Advanced effectively, consistently, and appropriately applies science and engineering practices to explain phenomena and design solutions to problems in the natural and the designed world. The student evaluates how well models, information, and patterns in data describe relationships among parts of systems, and uses scientific principles and reasoning to make predictions about how systems change over time. The student plans and evaluates investigations designed to determine the relationship between two variables. The student uses patterns in data to determine which solution to a problem best meets the criteria for success. The student uses data, mathematical and computational thinking, and scientific reasoning to construct and evaluate arguments and explanations about how parts of a system depend on each other.

MAP score range: 537–710

# **SAMPLE REPORTS**


## **Individual Student Report (ISR)**


The Individual Student Report (ISR) provides information about performance on the MAP Grade-Level Assessments in English Language Arts, Mathematics, and Science, describing results in terms of four levels of performance in a content area. This information may be used for instructional planning, as a point of reference during a parent/teacher conference, and for permanent record keeping. Other sources of information, such as classroom performance, should be used along with this report when determining the student's areas of strength or need.

Performance-level scores describe what students can do in terms of the content and skills assessed by the MAP. Because the English Language Arts, Mathematics, and Science Missouri Learning Standards are grounded in expectations for *college and career readiness*, the MAP Grade-Level Assessments are designed to measure each student's progress toward meeting those expectations. Teachers, students, and parents/guardians can use this information, in addition to how the student performs in the classroom, to determine what skills and abilities need to be acquired to enable the student to progress to higher performance levels. A student in the Proficient or Advanced level has met the standard. Students in the Below Basic and Basic levels have typically mastered foundational skills described in those levels; however, additional learning is needed for students to achieve the deeper levels of understanding and application outlined within the Missouri Learning Standards.


The following page contains a sample Individual Student Report.

# Sample Individual Student Report





**Missouri**  
DEPARTMENT OF ELEMENTARY & SECONDARY  
**EDUCATION™**



**Student  
Report**

**Student Name:** Tomkowicz, Joanna R

**Grade:** 4

**Student ID:** 0123456789

**Test Date:** Spring 2021

1

**District Name:** Any District

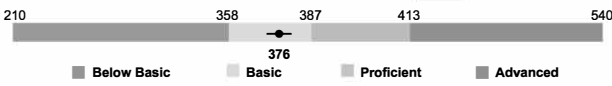
**School Name:** Any School

**School Group:** Home School

**Missouri Assessment Program (MAP)**

MAP stands for Missouri Assessment Program. It is a series of assessments for English language arts, mathematics and science at grades 3-8; and English language arts, mathematics, science and social studies in high school. These assessments are designed to check student learning to find out if Missouri students are reaching the Missouri Learning Standards Grade-Level Expectations.

**Mathematics | Scale Score** 376 2



The —●— symbol shows the student's scale score represented by the dark circle. The horizontal line represents the range of scale scores in which the student's test score would likely fall if the student were to take the same test again.

**Performance Level: Basic** 3

Basic demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in content expectations. The students need additional academic support to ensure success in the next grade level or course and to be on track for college and career readiness.

**Mathematics | Reporting Category Scale Scores** 4

Category	210	Student Results	540
Number Sense and Operations in Base Ten		397	
Number Sense and Operations in Fractions		350	
Relationships and Algebraic Thinking		390	
Geometry and Measurement + Data and Statistics**		388	

The —●— symbol shows the student's reporting category scale score represented by the dark circle. The horizontal line represents the range of reporting category scale scores in which the student's score would likely fall if the student were to take the same test again.

\* This value represents the total scale score that separates Basic level from Proficient level.

\*\* Categories were combined in cases where one or both categories did not have a sufficient number of items for reliable reporting. Combined categories yield at least 8 raw score points, which is a minimum number of points required for computation of category scale scores.

DATA RECOGNITION

DRC

CORPORATION

For more information on the MAP student report, please visit the Missouri Department of Elementary and Secondary Education website at <https://dese.mo.gov/map-information-parents>.

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- 1 This area of the report is reserved for the name and biographical data of the student taking the assessment.
- 2 This is your child's scale score.
- 3 This is your child's Performance Level.
- 4 This is your child's scale score for each of the listed reporting categories. NOTE: The scale score is not an average of the reporting category scale scores.

## Student Label

<b>MISSOURI ASSESSMENT PROGRAM</b> <b>SAMPLE, STUDENT1</b> <b>①</b>  Grade: <b>Grade 4</b> Test Date: <b>04/05/2021</b> DOB: <b>01/01/2009</b> MOSIS State ID: <b>1234567890</b>	<b>Content Area</b>	<b>Mathematics</b>
	Performance Level	<b>Basic</b> <b>②</b>
	MAP Scale Score	<b>376</b> <b>③</b>

Above is a sample of the MAP student label. The student label is designed so that each student's test results can be placed in the student's permanent record. A label is provided for every student who participated in the spring 2021 administration of the MAP. Each label has a self-adhesive backing so that it can be peeled from the sheet and placed in the student's cumulative school record. The label presents a snapshot of the student's results on the MAP. Separate labels are generated for each grade and content area; thus, a student will have multiple labels—one for each of the content areas administered within a grade.

- ① Student Demographic Information.** The left side of the label lists the name and biographical data of the student taking the assessment.
- ② Performance Level.** This is the student's Performance Level (Advanced, Proficient, Basic, or Below Basic).
- ③ Scale Score.** This is the student's Scale Score for the content area listed at the top of the label.

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